

ABSTRACT

In the conventional non-contact passive (power-source-less) IC card system method, a self-oscillator is built in a responder. The self-oscillator changes its oscillation frequency by the fluctuation of the power source voltage. Accordingly, it has been
5 difficult to perform time management in the circuit in the responder. In order to solve this problem, in a carrier signal (micro wave) transmitted from an interrogator, the information to be transmitted is multiplexed by a clock frequency component reproduced by the responder. Upon reception of this, the responder extracts the clock frequency component from the modulated wave multiplexed and oscillates a stable
10 frequency clock according to that component. Thus, it is possible to eliminate the problem that the information transfer rate of the circuit signal from the responder to the interrogator fluctuates according to the distance between the interrogator and the responder.